

Getting started plotting

This file gives instructions to help you make your first few successful plots using Ferret and an Xserver in a command line style rather than using the Atlas GUI.

Making a temperature map plot with the default settings

Open the Atlas by double clicking on the shortcut to the Marine Atlas on your desktop.

Open Ferret by double clicking on “Ferret_Start” on your desktop (c:\marineatlas\bin\noatlasferret.bat). A black window named Ferret_Start should appear. Type “ferret” at the bash\$ prompt. The program should start and a yes? prompt will then appear.

Type “go fer_temp_map” at the yes? prompt. A window should open and a temperature plot should appear with the default settings. Be patient waiting for the plot to appear. You will know Ferret is done making the plot when the yes? prompt appears again. Congratulations on creating your first plot!

Making a temperature map plot by entering your own settings

The next step is to modify the default settings to produce a temperature plot in the time, depth and region you desire. Data is available over the 2004-2006 time period in monthly values (i.e. in a range of 1 - 36) and the depth ranges from 0 – 2000db. The region is from 130 degrees east to 250 degrees east in longitude and from 25 degrees north to 50 degrees south in latitude. All of this information about the data is available in the C:\cygmin\ferret\TMAP\go\fer_temp_map file on your computer.

Let’s pick the following values:

Time: 2004 only

Depth: 0 – 750 db

Longitude: entire region (default values)

Latitude: entire region (default values)

To draw a plot with the values just chosen, more information must be added after the “go fer_temp_map” command. In this case, the order to enter the values is the starting time, the ending time, the minimum depth, the maximum depth, the minimum latitude, the maximum latitude, the minimum longitude, the maximum longitude. Look in each jnl file to find the order of entered variables. The values for each variable we chose above are listed below.

Starting time: 1 (the first month of 2004 and the first data point)

Ending time: 12 (the last month of 2004 and the 12th data point)

Depth minimum: 0

Depth maximum: 750

For the latitude and longitude values, since we are using the default values AND the prompts come AFTER the non-default values of time and depth, we do not need to enter anything. See cautionary note below for more information on this.

Type “go fer_temp_map 1 12 0 750” at the yes? prompt. A window should open and a temperature plot should appear with the settings you just entered. Congratulations on creating your first custom plot!

If you wanted to change the default region, simply enter the latitude and longitude values you desire following the same format as above. For example, with the same settings as above and

for 160 degrees east to 200 degrees east and the equator to 20 degrees south, the prompt would be:

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go fer_temp_map 1 12 0 750 -20 0 160 200
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Cautionary note

The values entered after the end of the jnl file name (fer_temp_map in this case), must be entered in the order the jnl file expects them without skipping any values. If you do not enter any values, the default ones are used. If you want to keep the default time and depth, but change the region, you must enter the default time and depth values before entering your modified latitude and longitude values. If, however, you want to keep the region the same, but change the time and depth, you need only enter those values and leave the region ones off as we did in the example above.

Creating more custom plots

You now know the basics for customizing any plot to the time, depth, and region you desire. The options for customizing each plot are in the jnl files. Follow the instructions in the jnl file for the order of the variables entered and enjoy creating the plots you want.